INTRODUCTION AND BACKGROUND TO THE OIL POLLUTION PREVENTION REGULATION

About the Compliance Assistance Guides...

The U.S. Environmental Protection Agency (EPA) has prepared this series of guides for owners and operators of oil facilities to help you better understand the Federal Oil Pollution Prevention regulation. This regulation has two sets of requirements -- the Spill Prevention Control and Countermeasure (SPCC) plan rule (an oil spill *prevention* program), and the Facility Response Plan rule (an oil spill *response* program). You *must* comply with these requirements if you meet the applicability provisions set out in each rule. You can find the Federal Oil Pollution Prevention regulation in Title 40 of the Code of Federal Regulations (CFR) part 112 (40 CFR part 112). The CFR is available at Federal Depository Libraries around the country, many of which are on the campuses of major colleges and universities. The CFR is also available online at http://www.gpo.gov. Be aware that the series is *guidance* only; you should review the regulation if you think it applies to you. A complete list of Oil Spill Program outreach guides and information on obtaining them appears in the "Compliance Assistance Guides" section at the end of this document. Or you may find the series at EPA's Website at http://www.epa.gov/oilspill.

This guide, *Introduction and Background to the Oil Pollution Prevention Regulation*, describes the basic SPCC and FRP rules, and will help you decide whether you and your staff need to read 40 CFR part 112 in depth.

What's the purpose of the Oil Pollution Prevention Regulation?

The United States produces, distributes, imports, and consumes large quantities of petroleum and non-petroleum oils. On average, the U.S. uses over 250 billion gallons of oil and petroleum products each year and imports an average of 114 billion gallons of crude oil and other petroleum products. Given the billions of gallons of oil being transported and stored in tanks throughout the country, the potential for an oil spill is significant.

Any oil spill can pose a serious threat to human health and the environment, requires remediation that extends beyond your facility's boundary, and results in substantial cleanup costs. Even a small spill can have a serious impact. A single *pint* of oil released into the water can cover *one acre* of water surface area and can seriously damage an aquatic habitat. It may take years for an ecosystem to recover from the damage caused by an oil spill. You may have to pay for cleanup operations that extend beyond your facility's boundary to affected offsite areas. EPA may levy heavy fines and penalties, especially if you were negligent.

Being in full compliance with the Oil Pollution Prevention regulation reduces the number and severity of

¹This guidance is based on the existing SPCC/FRP rule and policies in effect on August 30, 1994. This guidance may change as the SPCC rule is revised.

discharges from oil facilities, and the probability that you will pay high cleanup costs.

EPA issued the Federal Oil Pollution Prevention regulation to prevent oil spills from reaching the navigable waters of the U.S. or adjoining shorelines and to prepare facility personnel in responding to oil spills. You may be subject to this regulation, if your facility drills for, produces, gathers, stores, processes, refines, transfers, distributes, or consumes oil. Under the SPCC rule, EPA requires you to implement measures that will prevent and control oil spills due to human operational error or equipment failure. Under the FRP rule, if an oil spill from your facility could cause "substantial harm" to the environment, you *must* prepare and implement an FRP that includes an assessment of response resources; a training log; a description of drills and exercises that allow for an expeditious response to an oil spill; and other elements that will reduce a spill's impact and severity.

What facilities are regulated under the Oil Pollution Prevention Regulation?

Note, first, that EPA regulates *non-transportation-related fixed facilities*, including support equipment. The term also includes mobile or portable facilities, such as drilling or workover rigs, production facilities, and portable fueling facilities in a fixed, operating mode. Some transportation-related facilities or activities may have components considered to be "fixed" under 40 CFR part 112 (e.g., certain tanks at a pipeline facility, trucks stationed within a fixed facility and containing product). Note further, that the term *does not* include certain pipelines under the authority of the U.S. Departments of Interior and Transportation, railroad tank cars, and transport trucks in transit, and equipment associated with the transfer of bulk oil to or from water transportation vessels.

When EPA is considering whether a facility may affect U.S. navigable waters or the adjoining shoreline, it considers only the geography and location of the facility. It does not consider manmade features such as dikes, equipment, or other manmade structures that may contain spilled oil, or divert it from reaching the navigable waters or shoreline. Therefore, the majority of facilities in the U.S. have the potential to discharge to navigable waters or the shoreline.

What facilities are subject to the SPCC part of the oil pollution prevention regulation?

You must comply with EPA's SPCC requirements (40 CFR 112.1 through 112.7) if both of the following conditions describe your facility operations. The first is that you own or operate a non-transportation-related fixed facility that could reasonably be expected to discharge oil into or upon the navigable waters of the United States or adjoining shorelines. The second is that your facility has (1) an aboveground oil storage capacity of more than 660 gallons in a single container; or (2) a total aboveground oil storage capacity of more than 1,320 gallons; or (3) a total underground buried storage capacity of more than 42,000 gallons. (Note that if a tank has the requisite capacity, it doesn't matter whether the tank is filled to that capacity. The SPCC rule applies regardless of the tank's contents.) If your facility meets the SPCC criteria, you must prepare an SPCC plan and follow the other provisions of the SPCC rule.

What *must* the owner or operator do?

If you decide that the SPCC rule applies to your facility, read the general applicability and definitions for the Oil Pollution Prevention regulation (40 CFR 112.1 and 112.2), and the SPCC rule, codified in 40 CFR 112.3 through 112.7. Basically, the SPCC rules instruct you to prepare and implement a site-specific SPCC Plan to address three areas: operating procedures to prevent an oil spill; control measures to prevent a spill from entering navigable waters; and countermeasures to contain, clean up, and mitigate the effects of any oil spill that affects navigable waters. Note that if you own or operate a mobile or portable facility such as a drilling or workover rig, you may prepare a general -- not a site-specific -- SPCC Plan. Your plan *must* satisfy all other requirements of 40 CFR 112.

You *must* develop your plan within six months of the date you begin operations, and fully implement it within one year of starting operations. A registered Professional Engineer (PE) *must* certify the Plan. The PE's certification, however, does not relieve you of the ultimate responsibility for the plan. The cornerstone of the SPCC rule is the technical requirement to install structures and equipment designed to prevent the release of oil and its spread to surface waters. If installing these structures and equipment is impractical for reasons *other than cost*, you *must* develop an oil spill contingency plan and commit resources to control discharges.

EPA's Oil Spill Program developed a Sample SPCC Plan to help you prepare your plan. See the "Compliance Assistance Guides" section at the end of this document. The following text talks about SPCC requirements with greater specificity. If you think the requirements apply to your operations, you and your implementation staff should read the entire rule.

Owner and Operator Relationship

Both the owner and operator, whether private individuals, corporations, or other entities, are responsible for ensuring compliance with the SPCC requirements.

Through monitoring, an owner who leases property should ensure that the operator has adequately engineered his or her operations to meet the SPCC Plan requirements, and ensure that the facility Plan is adequate and properly implemented. The owner may wish to include language in the lease stating that the operator is responsible for providing the owner with prompt, accurate, and complete copies of all documents relating to the SPCC and FRP requirements.

Owners and their operators should work together to ensure compliance. It is important to remember, however, that responsibilities required by law cannot be changed by contract; therefore, **the owner may be liable for an operator's failure** to prepare and implement an SPCC Plan that is consistent with 40 CFR part 112.

Common SPCC Plan Elements

Your SPCC Plan should be unique to your facility, but must have certain elements common to all plans.

♦ Professional Engineer (PE) Certification

Your SPCC Plan must be reviewed and certified by a registered PE who is familiar with your facility and with 40 CFR part 112. The engineer's name, registration number and state of registration must be part of the Plan. The engineer's seal should be affixed to the Plan as part of the certification. By certifying the Plan, the engineer attests that he or she is familiar with your facility and with the SPCC Plan and requirements; and that your Plan has been prepared in accordance with good engineering practices.

♦ SPCC Plan Kept Onsite

If your facility is normally attended for at least eight hours a day, you *must* maintain a copy of the SPCC Plan there. Otherwise, you *must* keep the Plan at the nearest field office. Each SPCC Plan must be available to EPA for on-site review and inspection during normal working hours.

♦ Management Approval

A manager with the authority to commit resources necessary to implement the Plan must approve and sign your SPCC Plan.

♦ Plan Sequence Follows 40 CFR part 112

Your SPCC Plan must describe how the facility meets each applicable SPCC requirement and must follow the sequence in 40 CFR 112.7. Address and describe all spill prevention practices used at your facility in your SPCC Plan. While some items in 40 CFR part 112 may not apply to your facility, address them in your Plan just the same. For example, in a facility transfer operation, buried piping must be protectively wrapped or cathodically protected. If you do not have buried piping at your facility, say so in your SPCC Plan.

♦ Spill History

If there has been one or more oil spills within twelve months, include a written description of each spill, corrective actions taken, and plans for preventing recurring spills.

♦ Spill Prediction

If you believe an equipment failure may occur at your facility, include in your SPCC Plan a prediction of the direction, rate of flow, and total quantity of oil that could be spilled as a result of <u>each</u> major type of failure mode. Some examples of major failure modes are tank failure due to overflow, rupture or leakage; pipeline failure due to rupture or corrosion; leaking flanges, gaskets, expansion joints, valves, or catch pans; spills from bulk oil loading or unloading operations; and leaks due to other causes, such as failure of wastewater or stormwater treatment or disposal systems.

Topographic maps may be useful for predicting and illustrating the direction of flow and bodies of water which might be affected by a spill.

♦ Plan Review

You *must* amend your SPCC Plan whenever there is a change in facility design, construction, operation or maintenance that materially affects your facility's potential to spill oil into or upon navigable waters.

Further, you *must* review and evaluate your SPCC Plan at least once every three years from the time you become subject to the SPCC requirements. Within six months after this review and evaluation, you *must* amend your Plan to include more effective prevention and control technology if (1) such technology will significantly reduce the likelihood of a spill event from the facility, **and** (2) if the technology has been field-proven at the time of the review.

Remember that you need to have all amendments that address material changes certified by a Professional Engineer.

♦ Amendment by the Regional Administrator (RA)

After reviewing your SPCC Plan and any other information you have submitted to the Agency, the EPA RA may require that you amend your Plan. The RA will also consider recommendations made by the state agency in charge of water pollution control. The RA will propose written, specific amendments you need to implement. Once you receive this notification, you have 30 days to respond in writing. You can offer more information, arguments or counter proposals.

The RA will then review all available information and notify you either that the original notice is rescinded or that you *must* amend your plan. Usually, any required amendment must be incorporated into your SPCC Plan within 30 days after the final notice and implemented as soon as possible or on a date that the RA specifies. Unless the RA specifies an alternative date, you may not wait later than six months to implement the amendment.

You may appeal an RA's decision by writing to the EPA Headquarters Administrator within 30 days of receiving the final notice from the RA. You *must* send a copy of the appeal to the RA.

♦ Secondary Containment or Contingency Plans

Under 40 CFR 112.7, you *must* install appropriate containment and diversionary structures or equipment, such as dikes, berms, and retaining walls to prevent discharged oil from reaching navigable water (unless you can demonstrate that installing such structures or equipment is not practical or practicable).

You need more than economic considerations to demonstrate impracticability. An installation is impracticable if severe space limitations or other physical constraints may prevent you from installing structures or equipment to prevent oil from reaching navigable water. If it is impracticable for you to install the required containment structures or equipment, you *must* provide the following:

- A sound oil spill contingency plan following the provisions of 40 CFR part 109, and
- A written commitment of manpower, equipment and materials required for expeditious control and removal of any harmful quantity of spilled oil.

Developing an FRP may satisfy the requirement for a sound oil contingency plan.

♦ Spill Reporting

If there has been one oil spill of more than 1,000 gallons or two spills with a harmful quantity of oil entering navigable waters during any twelve-month period, you *must* submit a complete copy of the following information in writing to the RA within 60 days (and to the state agency in charge of the water pollution control activities):

- Name of the facility;
- Name(s) of the owner or operator of the facility;
- Location of the facility;
- Date and year of initial facility operation;
- Maximum storage or handling capacity of the facility and normal daily throughput;
- Description of the facility, including maps, flow diagrams and topographical maps;
- The cause(s) of such spill(s), including a failure analysis of the system or subsystem in which the failure occurred;
- Corrective actions and/or countermeasures taken, including a complete description of equipment repairs or replacements; and
- A copy of the SPCC Plan and any other information pertinent to the Plan or the spill(s).

Performance-Based SPCC Requirements

The SPCC rule also has performance-based requirements in 40 CFR 112.7 for drainage control, bulk storage tanks, transfer operations (e.g., intra facility piping), tank car and truck loading and unloading

racks, various onshore and offshore production facility operations, onshore and offshore oil drilling, production and workover facilities, security, and training. The "Compliance Assistance Guides" section at the end of this document lists the industry-specific outreach guides prepared by EPA.

What facilities are subject to the FRP part of the Oil Pollution Prevention Regulation? What must the owner or operator do?

The FRP rule applies to a subset of SPCC-regulated facilities: those that could cause substantial harm to the environment. There are two ways in which your facility may be classified as a substantial harm facility. First, you may make this determination through the initial screening outlined in 40 CFR 112.20(f)(1). Second, an EPA Regional RA may determine that your facility poses substantial harm to the environment. If an oil spill from your non-transportation related fixed facility could reasonably be expected to cause "substantial harm" to the environment from a discharge to U.S. navigable waters or the adjoining shoreline, you *must* prepare and submit an FRP to EPA for review.

Under 40 CFR 112.20(f)(1), the FRP criteria for substantial harm (self-selection criteria), a facility has the potential to cause substantial harm if it:

- Transfers oil over water to or from vessels and has a total oil storage capacity, including both aboveground storage tanks (ASTs) and underground storage tanks (USTs), greater than or equal to 42,000 gallons; or
- Has a total oil storage capacity, including both ASTs and USTs, that is greater than or equal to one million gallons and one of the following is true:
 - The facility does not have secondary containment for each aboveground storage area sufficient to contain the capacity of the largest AST within each storage area plus freeboard to allow for precipitation;
 - The facility is located at a distance such that a discharge could cause injury to an environmentally sensitive area;
 - The facility is located at a distance such that a discharge would shut down a public drinking-water intake; or
 - The facility has had a reportable spill greater than or equal to 10,000 gallons within the last five years.

An EPA RA may consider the self-selection criteria and other factors such as your facility's transfer operations, oil storage capacity, proximity to environmentally sensitive areas or drinking-water intakes, and spill history. The EPA RA will notify you if he or she determines that your facility poses a threat of

substantial harm. If your facility does not meet the criteria, you are not required to prepare an FRP. However, you *must* document this determination through a certification statement which will be made part of your SPCC Plan that is maintained at your facility.

What must the owner or operator do?

To determine if the FRP rule applies to your facility, read the general applicability and definitions for the Oil Pollution Prevention regulation (40 CFR 112.1 and 112.2). If you decide the requirements apply to your operations, you and your implementation staff should read the entire rule, especially the FRP rules codified in 40 CFR 112.20 and 112.21.

The following is a list of key FRP elements.

- Emergency Response Action Plan (an easily accessible stand alone section of the overall plan).
- Facility name, type, location, owner, and operator information.
- Emergency notification, equipment, personnel, and evacuation information.
- ♦ Identification and evaluation of potential spill hazards and previous spills.
- Identification of small, medium, and worst case discharge scenarios and response actions.
- ♦ Description of discharge detection procedures and equipment.
- Detailed implementation plan for containment and disposal.
- ♦ Facility and response self-inspection; training, exercises, and drills; and meeting logs. You can meet EPA's exercise requirements by using a program that follows the National Preparedness for Response Exercise Program (PREP).
- Diagrams of facility and surrounding layout, topography, and evacuation paths.
- ♦ Security measures including fences, lighting alarms, guards, emergency cutoff valves, and locks.

See compliance assistance guide, *Facility Response Planning*, for more specific information regarding the FRP requirements.

Incentives for compliance with SPCC:

- Human health concerns
 - Legal liability
- Protection of surface water quality and ecology
 - Oil pollution cleanup costs
 - Positive public image

The PREP guidelines:

USCG-X0191 and the Training Reference for Oil Spill Response: USCG-X0188 are available by mail or fax.

TASC Department Warehouse 3341Q 75th Avenue Landover, MD 20785 FAX: (301) 386-5394

When requesting copies, please indicate the document name and publication numbers.

What is an Oil?

Under § 311(a)(1) of the Clean Water Act (CWA) "oil" is "oil of any kind or in any form including, but not limited to, petroleum, fuel oil, sludge, oil refuse, and oil mixed with wastes other than dredged spoil." EPA interprets oil to include crude oil, petroleum and petroleum-refined products, and non-petroleum oils like vegetable and animal oils. Under the CWA, a substance that industry may not recognize as an oil (e.g., mineral oil) may be an oil for statutory purposes. "Oil" is also defined under other statutes including Title I of the Oil Pollution Act of 1990 (OPA). Currently, overlapping regulatory interpretations of "oil" exist. EPA's Oil Spill Program and the U.S. Coast Guard (USCG) are developing a nationally consistent policy and method to help you determine what substances are oils under the CWA. Work closely with EPA and the USCG (as appropriate) to determine if substances you store, transfer, or refine, are "oils."

What are Navigable Waters of the U.S.?

Section 502(7) of the Clean Water Act, defines the navigable waters of the United States as the following:

- 1) All navigable waters of the United States, as defined in judicial decisions prior to passage of the 1972 FWPCA (Pub. L. 92-500), and tributaries of such waters;
- 2) Interstate waters;
- 3) Intrastate lakes, rivers, and streams which are utilized by interstate travelers for recreational or other purposes; and
- 4) Intrastate lakes, rivers, and streams from which fish or shellfish are taken and sold in interstate commerce.

The term navigable waters also includes the territorial seas, as defined in 40 CFR 110.1.

WHERE DO I GO FOR MORE INFORMATION?

Compliance Assistance Guides

EPA's Compliance Assistance Guides are listed below. You can obtain these guides by contacting any of the 10 EPA Region offices or Headquarters or by visiting the Oil Spill Program Website at http://www.epa.gov/oilspill.

- ♦ Introduction and Background to the Oil Pollution Prevention Regulation
- ♦ Wholls Who: Federal Agency Roles and Responsibilities for Oil Spill Prevention and Response
- ♦ What to Expect During an SPCC/FRP Inspection
- ♦ Facility Response Planning
- ♦ Sample SPCC Plan and Sample Containment Volume Calculations
- ♦ SPCC Requirements and Oil Pollution Prevention Practices for Bulk Oil Storage Facilities
- ♦ SPCC Requirements and Oil Pollution Prevention Practices for Oil Production and Oil Drilling/Workover Facilities
- ♦ SPCC Requirements and Oil Pollution Prevention Practices for Farms and Ranches

- ♦ SPCC Requirements and Oil Pollution Prevention Practices for Mines and Quarries
- ♦ SPCC Requirements and Oil Pollution Prevention Practices for Vehicle Service Facilities
- ♦ Spill Prevention Requirements for Facilities Conducting Large Volume Transfer Operations
- ♦ Spill Prevention and Control for Marinas and Other Waterside Fueling Facilities
- ♦ Oil Spill Notification, Response, and Recovery

FEDERAL AGENCY CONTACT INFORMATION

U.S. EPA - Oil Spill Program

Office of Solid Waste and Emergency Response 401 M Street, SW, Washington, DC 20460 http://www.epa.gov/oilspill

or call the

EPCRA/RCRA/Superfund Hotline at (800) 424-9346

U.S. EPA - Chemical Emergency Preparedness and Prevention Office

Office of Solid Waste and Emergency Response 401 M Street, SW, Washington, DC 20460 http://www.epa.gov/swercepp/

U.S. Coast Guard - Marine Safety and Environmental Protection (Response Information)

 $2100\ 2nd\ Street,\ SW,\ Washington,\ DC\ 20593$

http://www.uscg.mil/hq/g-m/nmc/response/index.htm

U.S. Department of Transportation Research and Special Programs Administration Office of Pipeline Safety

400 7th Street, SW, Washington, DC 20590 http://ops.dot.gov/

U.S. Department of Labor - OSHA

OSHA National Information Line (800) 326-2577

200 Constitution Avenue

Washington D.C. 20215

FEDERAL AGENCY CONTACT INFORMATION

(You may also contact your Regional or Area OSHA office.)

http://spider.osha.gov/oshdir/

U.S. Department of the Interior - Minerals Management Service

Facility Response Plan Regulation

381 Elden Street, Herndon, VA 22070-4817

http://www.mms.gov/about.htm

U.S. EPA Headquarters

401 M St. SW

Washington, D.C. 20460

http://www.epa.gov/oilspill

Region 1 Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont

One Congress St., Suite 1100 (HBR)

Boston, MA 02114-2023

Region 2 New Jersey, New York, Puerto Rico, U.S. Virgin Islands

2890 Woodbridge Ave., Bldg. 209 (MS 211)

Edison, NJ 08837-3679

Region 3 Delaware, Maryland, Pennsylvania, Virginia, West Virginia

1650 Arch St. (3HS32)

Philadelphia, PA 19103-2029

Region 4 Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina,

Tennessee

61 Forsyth St.

Atlanta, GA 30365-3415

Region 5 Illinois, Indiana, Ohio, Michigan, Minnesota, Wisconsin

77 W. Jackson Blvd. (SE5J) Chicago, IL 60604-3590

Region 6 Arkansas, Louisiana, New Mexico, Oklahoma, Texas

1445 Ross Avenue (6SF-RP)

Dallas, TX 75202-2733

Region 7 Iowa, Kansas, Missouri, Nebraska

726 Minnesota Ave. (SUPRER+R)

Kansas City, KS 66101

Region 8 Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming

999 18th Street, Suite 500 (8EPR-SA)

Denver, CO 80202-2466

Region 9 Arizona, California, Hawaii, Nevada, Guam, American Samoa,

Trust Territories of the Pacific

75 Hawthorne Street (SFD1-4) San Francisco, CA 94105

Region 10 Alaska, Idaho, Oregon, Washington 1200 6th Avenue (ECL-116) Seattle, WA 98101

> Alaska Operations Office 222 West 7th Ave., #19 Anchorage, AK 99513-7588

ACRONYMS AND GLOSSARY OF TERMS RELATING TO OIL POLLUTION PREVENTION

The following list of acronyms and definitions can be used as a reference as you read through the Compliance Assistance Guides. The definitions in this guide apply specifically to the EPA or other agency programs.

Acronyms

ACP: Area Contingency Plan

ANSI: American National Standards Institute

API: American Petroleum Institute

ASME: American Society of Mechanical Engineers

AST: Aboveground Storage Tank

CERCLA: Comprehensive Environmental Response, Compensation and Liability Act

CFR: Code of Federal Regulations

CWA: Clean Water Act (also known as the Federal Water Pollution Control Act)

DOC: Department of Commerce

DOD: Department of Defense

DOI: Department of the Interior

DOT: Department of Transportation

E.O.: Executive Order

EPA: Environmental Protection Agency

ERAP: Emergency Response Action Plan

ERNS: Emergency Response Notification System

ERT: Emergency Response Team

FRP: Facility Response Plan

FWPCA: Federal Water Pollution Control Act (also known as the CWA)

ICP: Integrated Contingency Plan

MMS: Minerals Management Service (of DOI)

MOU: Memorandum of Understanding

NCP: National Contingency Plan

NFPA: National Fire Protection Association

NOAA: National Oceanic and Atmospheric Administration

NPDES: National Pollutant Discharge Elimination System

NRC: National Response Center

OPA or OPA90: Oil Pollution Act of 1990

OPS: Office of Pipeline Safety (of DOT)

OSC: On-Scene Coordinator

OSHA: Occupational Safety and Health Administration

OSLTF: Oil Spill Liability Trust Fund

OSRO: Oil Spill Removal Organization

OSWER: Office of Solid Waste and Emergency Response

PE: Professional Engineer

PPE: Personal Protective Equipment

PREP: (National) Preparedness for Response Exercise Program

QI: Qualified Individual

RA: Regional Administrator

RCP: Regional Contingency Plan

RCRA: Resource Conservation and Recovery Act

RSPA: Research and Special Programs Administration (of DOT)

RQ: Reportable Quantity

SOP: Standard Operating Procedure

SPCC: Spill Prevention Control and Countermeasure

UL: Underwriter ls Laboratories

USCG: United States Coast Guard (of DOT)

UST: Underground Storage Tank

Glossary of Terms

Aboveground storage tank. Any tank or other container that is aboveground, partially buried, bunkered, or in a subterranean vault. This includes floating fuel systems.

Atmospheric tank. Any tank designed to operate with vapor spaces at internal pressures that are approximately atmospheric (vapor pressures not exceeding 2.5 psig). Atmospheric storage tanks are used for commodities such as crude oil, heavy oils, gas oils, furnace oils, naphtha, gasoline, and nonvolatile chemicals.

Barrel. Forty-two United States gallons at 60 degrees Fahrenheit.

Belowground storage unit. A tank or other container located completely below the natural grade of the earth.

Berms. Either dirt, concrete or other constructed embankments that are commonly employed for secondary containment or drainage diversion purposes at oil storage or related operations.

Boom. A temporary floating barrier used to contain an oil spill.

Bulk storage tank. Any container used to store oil. Some purposes, these tanks are used for purposes including, but not limited to, the storage of oil prior to use, while being used, or prior to further distribution in commerce.

Bunkered tank. A storage tank constructed or placed in the ground by cutting the earth and re-covering it such that the tank breaks the natural grade of the land, or an abovegrade tank covered with earth. EPA considers a bunkered tank to be an AST; it must have secondary containment.

Catch basin. A depression, trench, or pit, which is a collection point for drainage, either water or spilled oil, that provides a means of containment for and prevents the uncontrolled discharge of the collected liquid from a facility or oil storage area.

Cathodic protection. Any one of several methods for protecting underground tanks and pipelines from corrosion. Corrosion results from an electric current which is caused by contact between metal surfaces, water, and the chemicals present in soils and water; cathodic protection counteracts this current.

Complex Facility. A facility possessing a combination of transportation-related and non-transportation-related components that is subject to the jurisdiction of more than one federal agency under section 311(j) of the Clean Water Act..

Dike. An embankment or wall that contains drainage water or spilled oil inside the walled area.

Discharge. Any emission (other than natural seepage), intentional or unintentional, including, but not limited to, spilling, leaking, pumping, pouring, emitting, emptying or dumping. For purposes of this part, the term [discharge] shall not include any discharge of oil which is authorized by a permit issued pursuant to Section 13 of the River and Harbor Act of 1899 (30 Stat. 1121, 33 U.S.C. 407), or Sections 402 or 405 of the FWPCA Amendments of 1972 (86 Stat. 816 et seq., 33 U.S.C. 1251 et seq.).

Emulsification. The formation of a mixture of two liquids, such as oil and water, in which one of the liquids is in the form of fine droplets and is dispersed in the other.

Evaporation. The physical change by which any substance is converted from a liquid to a vapor or gas.

Facility. Any mobile or fixed onshore or offshore building, structure, installation, equipment, pipe, or pipeline used in oil well drilling operations, oil production, oil refining, oil storage, and waste treatment. The boundaries of a facility may depend on several site-specific factors, including, but not limited to, the ownership or operation of buildings, structures, and equipment on the same site and the types of activities at the site.

Facility Response Plan. A detailed plan which must be prepared in accordance with 40 CFR 112.20 by facilities which may cause []substantial harm[] to the environment or exclusive economic zone. The plan must contain an Emergency Response Action Plan (ERAP) and demonstrate that a facility has the resources to respond to a worst case scenario discharge.

Hydrocarbons. A large class of organic compounds containing only carbon and hydrogen, common in petroleum products.

Impervious. Incapable of being penetrated.

Incineration. The destruction of wastes by burning at high temperatures.

Inland waters of the United States. Those waters of the United States lying inside the baseline from which the territorial sea is measured and those waters outside the baseline that are a part of the Gulf Intracoastal Waterway.

Level gauging systems and alarms. Any engineering control that indicates the level of liquid inside the tank and that is installed on tanks to prevent overfilling and spilling of liquid and damage to the tank(s).

Low pressure storage tank. Any tank designed to operate with vapor spaces at internal pressures above 2.5 psig, but not exceeding 15 psig. Low pressure storage tanks are used for commodities such as light crude oils, some gasoline blending stocks, light naphtha, pentane, and some highly volatile liquids.

Mobile or portable storage tank. Any container used to store oil that can be easily moved. For example, a 55-gallon drum or a 3000-gallon tank on wheels would both be considered mobile storage.

These storage containers require secondary containment, which must be addressed in the facility SPCC Plan.

Mousse. A thick, foamy oil and water mixture that forms when petroleum products mix with water due to wave and wind action.

Natural resources. Land, fish, wildlife, biota, air, water, groundwater, drinking water supplies, and other such resources (including the resources of the exclusive economic zone) belonging to, managed by, held in trust by, appertaining to, or otherwise controlled by, the United States, any state or local government or Indian tribe, or any foreign government.

Navigable waters. Waters of the United States as defined in \$\preceq\$502(7) of the FWPCA, including:

- (1) All navigable waters of the United States, as defined in judicial decisions prior to passage of the 1972 FWPCA (Pub. L. 92-500), and tributaries of such waters;
- (2) Interstate waters;
- (3) Intrastate lakes, rivers, and streams which are utilized by interstate travelers for recreational or other purposes; and
- (4) Intrastate lakes, rivers, and streams from which fish or shellfish are taken and sold in interstate commerce.

Navigable waters do not include prior converted cropland. For the purposes of the CWA, the final authority regarding CWA jurisdiction remains with EPA, except for the determination of an areals status as prior converted cropland by any other federal agency,.

Offshore facility. Any facility of any kind, located in, on, or under any of the navigable waters of the United States, which is not a transportation-related facility.

Offshore oil drilling, production, or workover facilities. All drilling or workover equipment, wells, flowlines, gathering lines, platforms, and auxiliary non-transportation-related equipment and facilities in a single geographical oil or gas field operated by a single operator.

Oil. Section 311(a)(1) of the Clean Water Act (CWA) defines [loil] as [loil of any kind or in any form including, but not limited to, petroleum, fuel oil, sludge, oil refuse, and oil mixed with wastes other than dredged spoil. EPA [ls interpretation of this definition includes crude oil, petroleum and petroleum-refined products, as well as non-petroleum oils such as vegetable and animal oils. Under the CWA definition, a substance that industry may not recognize as an oil (e.g., mineral oil) may be considered an oil.

In addition to the CWA, <code>[loil]</code> is defined under other statutes including Title 1 of the Oil Pollution Act of 1990 (OPA). Currently, overlapping regulatory interpretations of <code>[loil]</code> exist. EPA[s Oil Spill Program and the U.S. Coast Guard (USCG) are developing a nationally consistent policy and method to help the regulated community determine what substances are oils under the CWA.

Oil Removal Contingency Plan. A plan that follows 40 CFR part 109 that is required when an owner or operator determines that installing diversionary structures and equipment listed in 40 CFR 112.7(c) is not practicable. An OPA response plan or a response plan prepared in the Integrated Contingency Plan format will meet this requirement.

Oil-Water Separator System. Any system that is equipped with an inlet valve and a weir and baffle system that directs the oil and water to different compartments.

Onshore facility. Any facility located in, on, or under any land within the United States (other than submerged lands) that is not a transportation-related facility.

Onshore oil production facilities. All drilling or workover equipment, wells, flowlines, separation equipment, storage facilities, gathering lines, and auxiliary equipment and facilities in a single geographical oil or gas field operated by a single operator.

Otherwise subject to the jurisdiction of the United States. An entity may be subject to the jurisdiction of the United States by virtue of United States citizenship, United States vessel documentation or numbering, or as provided for by international agreement to which the United States is a party.

Owner or operator. Any person owning or operating an onshore facility or an offshore facility, and, in the case of any abandoned offshore facility, the person who owned or operated such facility immediately prior to such abandonment.

Oxidation. A chemical reaction that occurs when a substance is combined with oxygen, which may lead to degradation or deterioration of the substance.

Partially buried tank. A storage tank that is partially inserted or constructed in the ground but not fully covered with earth. See [Underground Storage Tank] and [Aboveground Storage Tank.]

Permanently closed. Any tank or facility that has been closed in the following manner:

- (1) all liquid and sludge have been removed from each tank and connecting lines. Any waste products removed were disposed of in accordance with applicable state and federal requirements.
- (2) all connecting lines have been blanked off, and valves are closed and locked. Conspicuous signs are posted on the tank warning that it is a permanently closed tank and that vapors above the lower explosive limit are not present.

Permittee. A person holding an authorization, license, or permit for geological exploration issued under 111 of the Outer Continental Shelf Lands Act (43 U.S.C. 1340) or applicable state law.

Person. An individual, firm, corporation, association, partnership, state, municipality, commission, or political subdivision of a state, or any interstate body.

Pond. A natural depression, which acts as a collection point for drainage.

Regional Administrator. The Regional Administrator (RA) of the Environmental Protection Agency or his or her designee in and for the Region in which the facility is located.

Removal costs. The costs incurred to contain, remove, and dispose of a discharge of oil.

Remove or removal. Containment and removal of contaminants, such as oil or hazardous substances, from the water and shorelines; or, actions necessary to minimize or mitigate damage to the public health or welfare, including, but not limited to, fish, shellfish, wildlife, and public and private property, shorelines, and beaches.

Responsible party. In the case of a vessel, any person owning, operating, or demise chartering the vessel. In the case of an onshore facility (other than a pipeline), any person owning or operating the facility, except a federal agency, state, municipality, commission, or political subdivision of a state, or any interstate body, that, as the owner, transfers possession and right to use the property to another person by lease, assignment, or permit.

Sheen. An iridescent appearance on the surface of the water.

Skimmers. Devices used to remove oil from the water surface.

Slick. A thin film of oil on the water surface.

Sludge. An aggregate of oil or oil plus other matter of any kind in any form other than dredged spoil having a combined specific gravity equivalent to or greater than water.

Solidifiers. Substances that can be added to liquid oil to make the oil [harden] into solids that either can be picked up from the water surface or left to sink to the bottom.

Sorbents. Substances that take up and hold water or oil.

SPCC Plan. The document required by 40 CFR part 112.3 that details the equipment, manpower, procedures, and steps to prevent, control, and provide adequate countermeasures to an oil spill. This plan is a written description of the facility's compliance with the measures in 40 CFR part 112.7.

Specific gravity. The ratio of the density of a substance to the density of water.

Spill event. A discharge of oil into or upon the navigable waters of the United States or adjoining shorelines, in harmful quantities, that violates applicable water quality standards or that causes a film or sheen upon the water.

Spill history. A written description of spill, corrective actions taken, and plans for preventing its recurrence that is required if a facility has experienced one or more spill events.

Storage capacity. The volume of a tank or container, for purposes of determining the applicability of 40 CFR part 112; the total capacity of the tank or container, whether the tank or container is filled with oil, or a mixture of oil and other substances, or is empty and not permanently closed.

Sump. A depression or trench constructed to collect drainage of water or spilled oil from storage, transfer or unloading areas.

Tank appurtenances. In addition to the tank itself, the additional pieces of equipment necessary to bring the tank into service. Examples of tank appurtenances include, but are not limited to:

- Ladder and gaugers platform.
- Shell manholes.
- Inlet outlet connections.
- Drawoffs (condensate, water and product).
- Gauge hatch.
- Vent connections.
- Liquid gauges and alarms.

Tar balls. Dense, black, sticky spheres of hydrocarbons formed from weathered oil.

Transportation-related. Interstate and intrastate onshore and offshore pipeline systems, including pumps and related appurtenances, and in-line or breakout storage tanks needed for the continuous operation of a pipeline system.

Underground storage tank. A tank that is completely covered with soil, situated below the natural grade of the land.

United States. The States, the District of Columbia, the Commonwealth of Puerto Rico, the Canal Zone, Guam, American Samoa, the Virgin Islands, and the Trust Territory of the Pacific Islands.

Valve: a movable mechanism that opens and closes to control the flow of liquid through a pipe or other passageway. Types of valves include check, ball, and gate.

Vessel. Watercraft or other artificial contrivance used, or capable of being used, as a means of transportation on water, other than a public vessel.

Viscosity. The internal properties of a liquid that offer resistance to flow.

Weathering. The process that occurs as an oil is exposed to the elements and loses its more volatile components.

Wetlands. Areas that are inundated or saturated by surface or ground water at a frequency or duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include playa lakes, swamps, marshes, bogs, prairie potholes, wet meadows, prairie river overflows, mudflats, and natural ponds.

Workover. Any remedial operation performed on a producing well to restore or increase production. Examples of workover operations include sand or liner removal, casing repair, acidizing, fracture stimulation, cementing, deeper drilling, recompletion to a different producing zone or stratum, and sidetracking.